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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/994,758	12/19/1997	KENJI NISHI	XA-7889A-RE	6998

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EXAMINER

MATHEWS, ALAN A

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 01/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

08/994,758

Applicant(s)

NISHI, KENJI

Examiner

Alan A. Mathews

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) 1-9, 13-39, 41-43, 45, 49-55, 68-70, 72-74, 76, 80-84, 96-99, 101-103, 105, 109-115, 128-142, 189 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☒ Claim(s) 1-8, 15-29 and 34 is/are allowed.

6) ☒ Claim(s) 9, 30, 33, 35-38, 41-43, 45, 49-53, 55, 68, 69, 72-74, 76, 80-82, 84, 96-98, 101-103, 105, 109-113, 115, 128, 130-132, 134-138, 140-142, 189 is/are rejected.

7) ☒ Claim(s) 13, 14, 31, 32, 39, 54, 70, 83, 99, 114, 129, 133 and 139 is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☒ Certified copies of the priority documents have been received in Application No. 08/377,504.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 27.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

U.S. Patent and Trademark Office  
PTO-326 (Rev. 04-01)

**Office Action Summary**

Part of Paper No. 31

Art Unit: 2851

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. Claims 42, 55, and 132 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 42 and 55, there is no proper antecedent basis for "the third driving system". It is further noted that contrary to Applicant's statement in his Remarks that newly amended claim 37 incorporates the features of claim 48, new amended claim 37 is not a combination of the previous claim 37 plus the features of claim 48, since new amended claim 37 deletes the "third driving system" that was recited in the previous version of claim 37. With respect to claim 132, "a fourth driving system" is indefinite, since no "third driving system" has been recited.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 2851

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 9, 30, 33, 35-38, 41-43, 45, 49-53, 55, 68, 69, 72-74, 76, 80-82, 84, 96, 97, 98, 101-103, 105, 109-113, 115, 128, 130-132, 134-138, 140-142, and 189, are rejected under 35 U.S.C. 102(e) as being anticipated by Ota et al (U. S. Patent No. 5,506,684, which is cited in Applicant's PTO-1449 filed September 28, 2001). Ota et al discloses in figure 16 and column 18, lines 11-62, a mask or reticle R and a substrate or wafer W. Element 108 is the mask stage for scanning the mask and element 111 is the wafer stage. Ota et al further discloses in column 18, lines 29-31, and line 4 of each of claims 1, 9, and 10, synchronously scanning the mask and the substrate. The first measuring system for measuring the position of the mask includes elements 118, 122, 123, and 124 (see also column 18, lines 48-52, and column 24, lines 21-24). The second measuring system for measuring a position of the substrate includes a laser interferometer (see column 18, lines 59-61). The adjusting system for moving the mask including the finely movable stage for relatively moving the mask on the mask stage is the slightly movable stage 107 set on scanning stage 108. Driving members for finely driving the finely movable stage 107 includes piezoelectric actuators 109A and 109B. With respect to claim 37, it is first noted that the newly amended claim 37 is not a combination of the previous claims 37 and 48 as stated in Applicant's Remarks, since the third driving system has been

Art Unit: 2851

deleted. In further respect to claim 37, Ota et al discloses in figure 16 a first object R (reticle) and a second object W (wafer). Element "PL" is the projection system. A first driving system drives scanning stage 108 and a second driving system includes piezoelectric actuators 109A and 109B for moving the first object or reticle. The first movable member is scanning stage 108 and the second movable member is slightly movable stage 107.

### *Allowable Subject Matter*

3. Claims 1-8, 15-29, and 34 allowed. Claims 13, 14, 31, 32, 39, 54, 70, 83, 99, 114, 129, 133, and 139 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Nishi (U. S. Patent No. 5,473,410) is cited to show the U.S. equivalent to the Japanese document JP A-4-196513 cited in Applicant's PTO 1449. It is noted that Nishi, which is listed as the inventor in both U. S. Patent No. 5,473,410 and Japanese document JP A-4-196513, is the same inventor as the instant application. Therefore, the Japanese document JP A-4-196513 does not qualify as a reference under 102(b). The patents on Applicant's PTO 1449 are cited for the same reasons Applicant cited them in his INFORMATION DISCLOSURE STATEMENT.

Art Unit: 2851

5. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on September 28, 2001, prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan A. Mathews whose telephone number is (703) 308-1706. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703) 308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are 305-3431 for regular communications and 305-3431 for After Final communications.

Application/Control Number: 08/994,758

Page 6

Art Unit: 2851

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

*Alan A. Mathews*

Alan A. Mathews  
Primary Examiner  
Art Unit 2851

AAM  
December 28, 2001